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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------------|-------------|----------------------|---------------------|------------------|
| 09/663,923 | 09/18/2000 | Takashi Noda | 31762-166222 | 3888 |
| 26694 | 7590 | 02/01/2005 | EXAMINER | |
| VENABLE, BAETJER, HOWARD AND CIVILETTI, LLP | | | SHEW, JOHN | |
| P.O. BOX 34385 | | | ART UNIT | |
| WASHINGTON, DC 20043-9998 | | | PAPER NUMBER | |
| | | | 2664 | |

DATE MAILED: 02/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

CA

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 09/663,923 | Applicant(s) NODA ET AL. | |
| | Examiner John L Shew | Art Unit 2664 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 7-12, 16 and 19 is/are allowed.
- 6) ☒ Claim(s) 15, 17, 18 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The indicated allowability of claims 15, 18 and 21 is withdrawn in view of the newly discovered reference(s) to Ezumi et al. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15, 18, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guy (Patent number 6298057) in view of Ezumi et al. (Patent number 6674550).

Claim 15, Guy teaches a communications apparatus for transferring data to an IP (Internet Protocol) network (Figure 1, column 4 lines 54-64) referenced by the network apparatus 102A connecting to the WAN 104 which includes the Internet, comprising an input circuit for capturing an image of a document and forming data to be transferred

representing the image (Figure 1, column 9 lines 66-67, column 10 lines 1-7) referenced by the first telephone transmitting to a Key Telephone Set 110 which connects to input Phone FAX Server Card wherein the FAX capability performs image capture for transmission, a transmitter for transferring a packet to the IP network (Figure 2) referenced by the Network Interface Card 218 which transmits to the LAN 113, an interface circuit for interfacing said transmitter with the IP network (Figure 1) referenced by the Router 114 which interfaces to the WAN 104 which is also the Internet, a packetizer circuit for packetizing the data to be transferred into a packet to develop the packet (Figure 4, Figure 7) referenced by the Network Packetizer 410 into Packet A format. Guy does not disclose a packet coupler.

Ezumi discloses a packet coupler for coupling two or more of the packets with each other (FIG. 17) referenced by the packet coupler 4-3 which couples the packet from the Modem to the Connecting Unit 4-4, said packet coupler inhibiting said packetizer circuit from developing the packet when said packet coupler includes more packets than a first predetermined amount (FIG. 41, column 19 lines 20-34) referenced by the step S461 where the Image Memory is tested for a predetermined Overlimit and if over the limit then the Standby condition results which inhibits further packet development.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the facsimile apparatus of Ezumi in the network apparatus of Guy for the purpose of connecting a plurality of types of communication lines.

Art Unit: 2664

Claim 18, Guy teaches a method of interfacing a communication terminal with an IP (Internet Protocol) network (Figure 1, column 4 lines 54-64) referenced by the network apparatus 102A connecting to the WAN 104 which includes the Internet, comprising the steps of receiving data to be transferred from the communication terminal Figure 1, column 9 lines 66-67, column 10 lines 1-7) referenced by the first telephone transmitting to a Key Telephone Set 110 which connects to input Phone FAX Server Card wherein the PFSC receives the data from the telephone communication terminal, packetizing the data to be transferred into a packet by a packetizer circuit (Figure 4, Figure 7) referenced by the Network Packetizer 410 into Packet A format, transferring the packet to the IP network (Figure 2) referenced by the Network Interface Card 218 which transmits to the LAN 113 in IP format. Guy does not teach coupling of packets. Ezumi discloses coupling two or more packets with each other by a packet coupler (FIG. 17) referenced by the packet coupler 4-3 which couples multiple packets from the Modem to the Connecting Unit 4-4, and inhibiting the packetizer circuit from developing the packet when the packet coupler includes more packets than a predetermined amount (FIG. 41, column 19 lines 20-34) referenced by the step S461 where the Image Memory is tested for a predetermined Overlimit and if over the limit then the Standby condition results which inhibits further packet development.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the facsimile apparatus of Ezumi in the network apparatus of Guy for the purpose of connecting a plurality of types of communication lines.

Claim 21, Guy teaches a storage medium (Figure 2) referenced by the Server Memory Module 214, for storing therein a procedure of interfacing a communication terminal with an IP (Internet Protocol) network (Figure 1, column 4 lines 54-64) referenced by the network apparatus 102A interfacing to the WAN 104 which includes the Internet, comprising the steps of receiving data to be transferred from the communication terminal (Figure 1, column 9 lines 66-67, column 10 lines 1-7) referenced by the first telephone transmitting to a Key Telephone Set 110 which connects to input Phone FAX Server Card wherein the PFSC receives the data from the telephone communication terminal, packetizing the data to be transferred into a packet by a packetizer circuit (Figure 4, Figure 7) referenced by the Network Packetizer 410 into Packet A format, transferring the packet to the IP network (Figure 2) referenced by the Network Interface Card 218 which transmits to the LAN 113 in IP format. Guy does not teach coupling of packets.

Ezumi discloses coupling two or more packets with each other by a packet coupler (FIG. 17) referenced by the packet coupler 4-3 which couples multiple packets from the Modem to the Connecting Unit 4-4, and inhibiting the packetizer circuit from developing the packet when the packet coupler includes more packets than a predetermined amount (FIG. 41, column 19 lines 20-34) referenced by the step S461 where the Image Memory is tested for a predetermined Overlimit and if over the limit then the Standby condition results which inhibits further packet development.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the facsimile apparatus of Ezumi in the network apparatus of Guy for the purpose of connecting a plurality of types of communication lines.

Claims 17, 20, 22, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guy and Ezumi as applied to claims 15, 18, 21 above, and further in view of Shaffer et al. (Patent number 6370163).

Claim 17, Guy teaches a method of interfacing a communication terminal with an IP (Internet Protocol) network (Figure 1, column 4 lines 54-64) referenced by the network apparatus 102A interfacing to the WAN 104 which includes the Internet, comprising the steps of receiving data to be transferred from a communication terminal (Figure 1, column 9 lines 66-67, column 10 lines 1-7) referenced by the first telephone transmitting to a Key Telephone Set 110 which connects to input Phone FAX Server Card wherein the PFSC receives the data from the telephone communication terminal, allotting a header associated with the determined model to the packet (Figure 7) referenced by Packet headers 702A 702B 702C each representative of a different model. Ezumi teaches determining when the received data are facsimile data which model the received data corresponds to (FIG. 38, column 3 lines 65-67, column 4 lines 1-3)

referenced by step S401 by Monitor Select which determines the type of FAX transmission. Guy and Ezumi do not teach determining a transmission delay.

Shaffer teaches determining a delay in transmission over the IP network (FIG. 1, column 3 lines 10-15, 26-36) referenced by control program calculating the packet length based on end-to-end transmission delay, adjusting a transfer rate of transferring the data on a basis of the delay determined (column 5, lines 39-42) referenced by a control program processing the end-to-end transmission delay to determine packet length where the packet length determines transfer rate since larger packets inherently takes longer to transfer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the delay based packet adjustment controller of Shaffer in the FAX network apparatus of Guy and Ezumi for the purpose of minimizing end-to-end delay caused by network traffic and topology.

Claim 20, Guy teaches a storage medium (Figure 2) referenced by the Server Memory Module 214, for storing therein a procedure of interfacing a communication terminal with an IP (Internet Protocol) network (Figure 1, column 4 lines 54-64) referenced by the network apparatus 102A interfacing to the WAN 104 which includes the Internet, comprising the steps of receiving data to be transferred from a communication terminal (Figure 1, column 9 lines 66-67, column 10 lines 1-7) referenced by the first telephone transmitting to a Key Telephone Set 110 which connects to input Phone FAX Server Card wherein the PFSC receives the data from the telephone communication terminal,

allotting a header associated with the determined model to the packet (Figure 7) referenced by Packet headers 702A 702B 702C each representative of a different model, and transferring the data to the IP network (Figure 2) referenced by the Network Interface Card 218 which transmits to the LAN 113 using an IP protocol.

Ezumi teaches determining when the received data are facsimile data which model the received data corresponds to (FIG. 38, column 3 lines 65-67, column 4 lines 1-3) referenced by step S401 by Monitor Select which determines the type of FAX transmission. Guy and Ezumi do not teach determining a transmission delay.

Shaffer teaches determining a delay in transmission over the IP network (FIG. 1, column 3 lines 10-15, 26-36) referenced by control program calculating the packet length based on end-to-end transmission delay, adjusting a transfer rate of transferring the data on a basis of the delay determined (column 5, lines 39-42) referenced by a control program processing the end-to-end transmission delay to determine packet length where the packet length determines transfer rate since larger packets inherently takes longer to transfer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the delay based packet adjustment controller of Shaffer in the FAX network apparatus of Guy and Ezumi for the purpose of minimizing end-to-end delay caused by network traffic and topology.

Claim 22, Guy teaches a method of interconnecting a communication terminal to an Internet Protocol (IP) network (Figure 1, column 4 lines 54-64) referenced by the

network apparatus 102A interfacing to the WAN 104 which includes the Internet, comprising the steps of receiving a packet transmitted over the IP network (Figure 1, column 4 lines 54-64) referenced by apparatus 102B receiving packets from the WAN 104 which includes the Internet, and depacketizing the received packet into data (Figure 6B) referenced by step 650 of decompress of the packet into an analog signal.

Ezumi teaches determining which model of a plurality of models the received packet corresponds to (FIG. 38, column 3 lines 65-67, column 4 lines 1-3) referenced by step S401 by Monitor Select which determines the type of FAX transmission. Guy and Ezumi do not teach determining a transmission delay.

Shaffer teaches determining a delay in transmission over the IP network (FIG. 1, column 3 lines 10-15, 26-36) referenced by control program calculating the packet length based on end-to-end transmission delay, adjusting a size of the data on a basis of the delay determined (column 5, lines 39-42) referenced by a control program processing the end-to-end transmission delay to determine packet length, transferring the data having the size adjusted to the communication terminal (FIG. 1, column 4 lines 9-24) referenced by the data transmission from IP Telephone 1 to IP Telephone 2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the delay based packet adjustment controller of Shaffer in the FAX network apparatus of Guy and Ezumi for the purpose of minimizing end-to-end delay caused by network traffic and topology.

Claim 23, Guy teaches a method of interconnecting a communication terminal to an Internet Protocol (IP) network (Figure 1, column 4 lines 54-64) referenced by the network apparatus 102A interfacing to the WAN 104 which includes the Internet, comprising the steps of receiving a packet transmitted over the IP network (Figure 1, column 4 lines 54-64) referenced by apparatus 102B receiving packets from the WAN 104 which includes the Internet, and depacketizing the received packet into data (Figure 6B) referenced by step 650 of decompress of the packet into an analog signal.

Ezumi teaches determining which model of a plurality of models the received packet corresponds to (FIG. 38, column 3 lines 65-67, column 4 lines 1-3) referenced by step S401 by Monitor Select which determines the type of FAX transmission. Guy and Ezumi do not teach determining a transmission delay.

Shaffer teaches determining a delay in transmission over the IP network (FIG. 1, column 3 lines 10-15, 26-36) referenced by control program calculating the packet length based on end-to-end transmission delay, adjusting a transfer rate of transferring the data on a basis of the delay determined (column 5, lines 39-42) referenced by a control program processing the end-to-end transmission delay to determine packet length where the packet length determines transfer rate since larger packets inherently takes longer to transfer, and transferring the data having the transfer rate adjusted to the communication terminal (FIG. 1, column 4 lines 9-24) referenced by the data transmission from IP Telephone 1 to IP Telephone 2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the delay based packet adjustment controller of Shaffer in the FAX

network apparatus of Guy and Ezumi for the purpose of minimizing end-to-end delay caused by network traffic and topology.

Allowable Subject Matter

1. Claims 1-4, 7-12, 16, 19, allowed.

Response to Arguments

On further review of the claims, the claims 15, 18 and 21 are now rejected in light of new found prior art. Applicant's argument on Schaffer's delay control process has been fully considered but they are not persuasive. The presentation of an end-to-end delay process to determine packet length is sufficient towards a circuit performing the same function. Claims 17, 20-23 are also rejected in light of the new found prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Shew whose telephone number is 571-272-3137. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

js

A handwritten signature in black ink, appearing to be 'W. Chin', with a long horizontal line extending to the right.